BEST AVAILABLE COPY

Application No. 10/092,381 Response Dated March 21, 2006 Attorney Docket No. 30222/83:9 US (MHM Docket No. 16728US02) Confirmation No. 8204

REMARKS

An Final Office Action was mailed by the Patent Office on December 21, 2005. An Examiner Interview was conducted on February 1, 2006. An Amendment and Response was filed on February 21, 2006, which included the substance of the interview and addressed issues raised in both the Final Office Action and the interview. The Patent Office subsequently mailed an Advisory Action and Notice of Non-Compliant Amendment on March 3, 2006. This Amendment and Response addresses the issues raised in both the Advisory Action and the Notice of Non-Compliant Amendment. Applicants believe that the deficiencies noted therein have now been corrected, and therefore request entry and consideration of this Amendment and Response on the merits. Applicants believe that the Amendments presented herein place claims 12, 24, 26-30 and 31-36 in a condition for allowance.

I. Status of the Specification

During the Examiner Interview on February 16, 2006, the Examiner raised a new matter rejection with respect to references to Huntsman products noted in Examples 1 and 3-9 of the substitute specification filed on May 6, 2004. The Advisory Action and the Notice of Non-Compliant Amendment mailed on March 3, 2006 provide further guidance with respect to overcoming the new matter rejection.

Applicants note that the original application, however, inadvertently omitted an appropriate explanation that layer E was made from a Huntsman product rather than a Dow product. The substitute specification filed May 6, 2004 attempted to correct that omission.

The continuation sheet to the Advisory Action and the Notice of Non-Compliant Amendment provides that "the phrase '(13510A)' may be corrected to – (13S10A) (available from Huntsman Chemical) – by showing that the product code '(13510A)' has typographical error and should have been '(13S10A)' available from Huntsman Chemical as shown by a Product Data Sheet of Huntsman Chemical dated on or before the filing date of this application." (Continuation Sheet PTOL-324.) In accordance with that

instruction, paragraph 0040 of Example 1 and paragraph 0044 of Example 3-9 have been amended above to retain their references to the Huntsman product used in Example 1. Applicants believe that the present amendments to paragraphs 0040 and 0042, together with Attachments A-C, discussed further below, accurately describe Examples 1 and 3-9 and show that the current references to Huntsman Chemical are not new matter.

The indication in the original specification that layer E in Example 1 was made from a Dow Chemical Company ("Dow") product with the designation 13510A was a typographical error. This would be readily discernable to one of ordinary skill in the art because, for example, Dow does not have a product with such a designation. Dow also does not have a product designated 13S10A, which is the correct designation for the Huntsman Chemical ("Huntsman") product that was used in Example 1. This is evidenced by the searches performed on the Dow website for Material Safety Data Sheets for both 13510A and 13S10A, which ended with a "No Results" outcome. (See Attachment A). However, a search for product designation 61520.09L, a component of layer A in Example 1 of the present application, resulted in the finding of a Material Safety Data Sheet for that Dow product. (See Attachment B).

As the instant amendments to paragraphs 0040 and 0042 of the specification provide, layer E of Example 1 was made with a Huntsman product with the designation 13S10A. One of ordinary skill in the art would be able to readily discern that this is correct, as evidenced, for example, by the Material Safety Data Sheet for Huntsman product 13S10A. (See Attachment C.) The Material Safety Data Sheet for Huntsman Chemical's 13S10A is dated March 6, 2001, which is before the filing date of the current application.

Applicants respectfully submit the current amendments to paragraphs 0040 and 0042 simply correct and clarify typographical and inadvertent errors in the original specification, and do not add new matter.

The present amendments to the specification also include amendments to paragraph 0032 to remove extraneous characters that appeared inadvertently in the specification. These extraneous characters were noted by the Examiner during the

Examiner Interview on February 16, 2006. Specifically, an extraneous "p" and an extraneous "4" have been deleted from the fifth sentence of paragraph 0032.

Applicants believe that the present amendments to the specification provide proper clarification and correction to inadvertent errors, and that they do not present new matter. Applicants respectfully request entry of the amendments to the specification submitted herein.

II. Status of the Claims

Claims 1, 3-13, 24-36 and 38-60 are currently rejected. In light of the discussion during the Examiner Interview regarding the allowability of claims 12 and 31-36, Applicants have canceled without prejudice claims 1, 3-11, 13, 25 and 38-60 for the purposes of filing a continuing case addressing these particular claims. As a result, Applicants reserve the right to file the canceled claims in a continuation or continuation-in-part application claiming priority to the present application.

Applicants note that in the Amendment and Response filed on February 21, 2006, the listing of the claims recited that claims 3-11 were withdrawn. The Advisory Action and the Notice of Non-Compliant Amendment subsequently mailed on March 3, 2006, stated that these claims should have been canceled. Accordingly, the instant listing of the claims recites that claims 3-11 have been canceled.

Claim 12 has been amended to incorporate the elements previously contained in claim 1, and additionally including an amendment reciting that the non-cling layer comprises a copolymer of propylene and ethylene wherein said copolymer has an ethylene content of about 1% by weight to about 10% by weight, as discussed with the Examiner during the Interview on February 15, 2006. Applicants respectfully submit that claim 12 is now in a condition for allowance.

Claims 31-36 were objected to as being dependent upon a rejected base claim, but the December 21, 2005 Office Action indicated that they would be allowable if rewritten in independent form. (See December 21, 2005 Office Action at p. 4). Accordingly, claim 31 has been rewritten in independent form to include all of the limitations of base

Attorney Docket No. 30222/83:9 US (MHM Docket No. 16728US02) Confirmation No. 8204

Application No. 10/092,381 Response Dated March 21, 2006

claim 24. Claims 32-36 depend from claim 31. Applicants respectfully submit that claims 31-36 are now in a condition for allowance.

Claim 24 has been amended to recite that the "at least one first layer" comprises "a heterogeneously branched ultra low density polyethylene and from about 15% by weight to about 40% by weight of a plastomer." This amendment is supported in the specification at, for example, paragraph 0024, and is additionally supported by originally submitted claim 25. As amended, claims 26-30 depend from amended claim 24. The cited references to Dohrer and Koch do not disclose plastomer. Applicants respectfully submit that the current rejection of claims 24 and 26-30 under 35 U.S.C. 103(a) should be withdrawn. Applicants respectfully submit that claims 24 and 26-30 are now in a condition for allowance.

CONCLUSION

Applicants believe that all of the issues raised in both the Advisory Action and the Notice of Non-Compliant Amendment, mailed on March 3, 2006, have now been addressed. A copy of the Notice of Non-Compliant Amendment is attached. (See Attachment D). Amendments have been made to clarify and correct inadvertent errors that were present in the specification. As shown above, these amendments do not present new matter. Additionally, claims 1, 3-13, 24-36 and 38-60 are currently rejected. Applicants have canceled claims 1, 3-11, 13, 25 and 38-60 without prejudice. Claims 12, 24, 26 and 29-31 have been amended in accordance with the direction provided in the Final Office Action mailed on December 21, 2005. For all of the reasons stated herein, it is respectfully submitted that the claims as amended are patentable over the cited art and it is believed that the claims are in condition for allowance as noted herein. Allowance of currently presented claims 12, 24, 26-30 and 31-36 is respectfully requested.

Applicants believe that no fee is currently due. However, the Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Account No. 13-0017.

Attorney Docket No. 30222/83:9 US (MHM Docket No. 16728US02) Confirmation No. 8204

Dated: March 21, 2006

Respectfully submitted,

Jennifer Lacroix Reg. No. 46,852

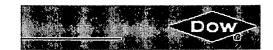
Attorney for Applicants

McAndrews, Held & Malloy, Ltd. 500 West Madison Street, 34th Floor Chicago, IL 60661

Telephone: (312) 775-8000 Facsimile: (312) 775-8100

Page 1 of 1 Search Dow.com





| Safety Data Sheets & Produc | | | Search Sear | rch Tips | | · - | | |
|---|-------------------|----------------------------------|------------------|----------|-----|------|--|--|
| What are you searching for? 1 Selected Country: UNITED STATES | 3510A | | <u>Geal</u> cina | | | | | |
| Refine Results | Results | Showing results: 0 - 0 of 0 hits | | | | | | |
| Language | Product Code | Product Name | Language | Size | PDF | Text | | |
| Select A Language | No Results Found. | | | | | | | |
| Common Chemical Name | | | | | | | | |
| Select A Common Chemical | | | | | | | | |
| Product Name | | | | | | | | |
| Select A Product Name | | | | | | | | |
| Product Code | | | | | | | | |
| Select A Product Code | | | | | | | | |
| | _ | | | | | • | | |

Page 1 of 1 Search Dow.com





| | t Finder | | | | _= | | | |
|-----------------------------|-------------------|----------------------------------|----------|------|----------|----------|--|--|
| What are you searching for? | I3510A | Search Search Tips | | | | | | |
| Refine Results | Results | Showing results: 0 - 0 of 0 hits | | | | | | |
| Language | Product Code | Product Name | Language | Size | PDF | Text | | |
| Select A Language | No Results Found. | <u> </u> | | | <u> </u> | <u> </u> | | |
| Common Chemical Name | | | | | | | | |
| Select A Common Chemical | | | | | | | | |
| Product Name |] | | | | | | | |
| Select A Product Name | | | | | | | | |
| Product Code | | | | | | | | |
| Select A Product Code | | | | | | | | |
| | | | | | | | | |

Material Safety Data Sheet Dow



1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Page: 1

24-Hour Emergency Phone Number: 989-636-4400

Product: XUS 61520.09L EXPERIMENTAL ULTRA LOW DENSITY COPOLYMER

Product Code: 71885

Effective Date: 08/28/02 Date Printed: 12/26/02 MSD: 002101

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

Copolymer of ethylene and octene-1 CAS# 026221-73-8 >99%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

******************** Translucent or white pellets or granules. Odorless. Slipping hazard. ******************

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: Solid or dust may cause irritation or corneal injury due to mechanical action. Vapor may cause eye irritation experienced as mild discomfort and redness.

SKIN: Brief contact is essentially non-irritating to skin. Mechanical injury only. Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns. No adverse effects anticipated by skin absorption.

INGESTION: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause choking if swallowed.

INHALATION: No adverse effects are anticipated from single exposure to dust. Vapors/fumes released during thermal processing may cause respiratory irritation.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Additives are encapsulated

⁽Continued on page 2 , over)
* OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY

Product: XUS 61520.09L EXPERIMENTAL ULTRA LOW DENSITY COPOLYMER

Product Code: 71885

Effective Date: 08/28/02 Date Printed: 12/26/02 MSD: 002101

in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

CANCER INFORMATION: No relevant information found.

TERATOLOGY (BIRTH DEFECTS): No relevant information found.

REPRODUCTIVE EFFECTS: No relevant information found.

4. FIRST AID

EYE: Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

SKIN: If molten material comes in contact with the skin, do not apply ice but cool under ice water or running stream of water. DO NOT attempt to remove the material from skin. Removal could result in severe tissue damage. Seek medical attention immediately.

INGESTION: If swallowed, seek medical attention. May cause gastrointestinal blockage. Do not give laxatives. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION: Move person to fresh air; if effects occur, consult a physician.

NOTE TO PHYSICIAN: If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: Not applicable METHOD USED: Not applicable

AUTOIGNITION TEMPERATURE: Not applicable

FLAMMABILITY LIMITS

LFL: Not applicable UFL: Not applicable

HAZARDOUS COMBUSTION PRODUCTS: During a fire, smoke may contain

(Continued on page 3)

^{*} OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY

MATERIAL SAFETY DATA SHEET

PAGE: 3

Product: XUS 61520.09L EXPERIMENTAL ULTRA LOW DENSITY COPOLYMER Product Code: 71885

Effective Date: 08/28/02 Date Printed: 12/26/02 MSD: 002101

the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: carbon monoxide, carbon dioxide.

- OTHER FLAMMABILITY INFORMATION: Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, do not permit dust to accumulate. Dense smoke is emitted when burned without sufficient oxygen.
- EXTINGUISHING MEDIA: Water fog or fine spray, dry chemical fire extinguishers, carbon dioxide fire extinguishers and foam. General purpose synthetic foams (including AFFF type) or protein foams are preferred if available. Alcohol resistant foams (ATC type) may function.
- FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires.
- PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.
- 6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)
 - PROTECT PEOPLE: Spilled material may cause a slipping hazard.

 Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
 - PROTECT THE ENVIRONMENT: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.
 - CLEANUP: Sweep up. Contain spilled material if possible. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations for additional information.

7. HANDLING AND STORAGE

(Continued on page 4 , over)

^{*} OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY

Product: XUS 61520.09L EXPERIMENTAL ULTRA LOW DENSITY COPOLYMER

Product Code: 71885

Effective Date: 08/28/02 Date Printed: 12/26/02 MSD: 002101

HANDLING: Avoid breathing process fumes. Electrically ground all equipment. When appropriate, unique handling information for containers can be found on the product label.

STORAGE: Store in accordance with good manufacturing practices.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles. If exposure causes eye discomfort, use a full-face respirator.

SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed. Use gloves with insulation for thermal protection, when needed.

RESPIRATORY PROTECTION: Use an approved air-purifying respirator when vapors are generated at increased temperatures or when dust or mist is present.

EXPOSURE GUIDELINE(S): None established.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Translucent white, pellets or granules

ODOR: Ocorless

VAPOR PRESSURE: Not applicable VAPOR DENSITY: Not applicable BOILING POINT: Not applicable

SOLUBILITY IN WATER/MISCIBILITY: Nil SPECIFIC GRAVITY OR DENSITY: 0.84 - 0.97

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

CONDITIONS TO AVOID: Exposure to elevated temperatures can cause product to decompose.

(Continued on page 5)
* OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY

Product: XUS 61520.09L EXPERIMENTAL ULTRA LOW DENSITY COPOLYMER

Product Code: 71885

Effective Date: 08/28/02 Date Printed: 12/26/02 MSD: 002101

INCOMPATIBILITY WITH OTHER MATERIALS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition products depend upon temperature, air supply and the presence of other materials. Processing may release fumes and other decomposition products. At temperatures exceeding melt temperatures, polymer fragments can be released. Fumes can be irritating. Decomposition products can include and are not limited to: carbon monoxide, carbon dioxide, aldehydes, alcohols, organic acids. Decomposition products can include trace amounts of hydrocarbons.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

SKIN: The dermal LD50 has not been determined.

INGESTION: Single dose oral LD50 has not been determined.

MUTAGENICITY: No relevant information found.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No bioconcentration is expected because of the relatively high molecular weight (MW >1000). In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material is expected to float.

DEGRADATION & PERSISTENCE: This water insoluble polymeric solid is expected to be inert in the environment. Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

ECOTOXICITY: Not expected to be acutely toxic, but pellets may mechanically cause adverse effects if ingested by waterfowl or aquatic life.

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

(Continued on page 6 , over)

^{*} OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY

Product: XUS 61520.09L EXPERIMENTAL ULTRA LOW DENSITY COPOLYMER Product Code: 71885

Effective Date: 08/28/02 Date Printed: 12/26/02 MSD: 002101

DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal destruction device, and landfill.

For additional information, refer to Stability & Reactivity Information, MSDS Section 10.

As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone Dow's Customer Information Center at 800-258-2436 or 989-832-1556 for further details.

14. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (D.O.T.): This product is not regulated by D.O.T. when shipped domestically by land.

CANADIAN TDG INFORMATION: This product is not regulated by TDG when shipped domestically by land.

15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

⁽Continued on page 7)

^{*} OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY

Product: XUS 61520.09L EXPERIMENTAL ULTRA LOW DENSITY COPOLYMER

Product Code: 71885

Effective Date: 08/28/02 Date Printed: 12/26/02 MSD: 002101

See other sections for health and safety information.

U.S. REGULATIONS

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category

TOXIC SUBSTANCES CONTROL ACT (TSCA):

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: This product is not known to contain any substances subject to the disclosure requirements of

New Jersey Pennsylvania

OSHA HAZARD COMMUNICATION STANDARD:

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CANADIAN REGULATIONS

(Continued on page 8 , over) * OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY

Product: XUS 61520.09L EXPERIMENTAL ULTRA LOW DENSITY COPOLYMER

Product Code: 71885

Effective Date: 08/28/02 Date Printed: 12/26/02 MSD: 002101

REGULATORY INFORMATION (CONTINUED)

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

This product is not a "Controlled Product" under WHMIS.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):

All substances in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

16. OTHER INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Health 0 Flammability 1 Reactivity

MSDS STATUS: Revised Section 6.

^{*} OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied, Is Made. Consult The Dow Chemical Company For Further Information.

HUNTSMAN

MATERIAL SAFETY DATA SHEET

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT

PRODUCT CODE AND NAME

13S10A

DATE ISSUED

3/6/2001

DATE PRINTED

3/6/2001

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL IDENTITY

PRODUCT CODE AND NAME

13S10A

Chemical Name and/or Family or Description:

Polypropylene copolymer

COMPANY INFORMATION

Huntsman Polymers Corporation P.O. Box 3986 Odessa, TX 79760

TELEPHONE NUMBERS

Transportation Emergency

Company: (800) 328-8501

CHEMTREC: (800) 424-9300

Medical Emergency: (409) 722-9673 (24 Hour) General MSDS Assistance: (713) 235-6432 Technical Information: (800) 233-1159

2. COMPOSITION AND INFORMATION ON INGREDIENTS

THE CRITERIA FOR LISTING COMPONENTS IN THE COMPOSITION SECTION ARE AS FOLLOWS: CARCINOGENS ARE LISTED WHEN PRESENT AT 0.1 % OR GREATER; COMPONENTS WHICH ARE OTHERWISE HAZARDOUS ACCORDING TO OSHA ARE LISTED WHEN PRESENT AT 1.0 % OR GREATER: NON-HAZARDOUS COMPONENTS ARE LISTED AT 3.0 % OR GREATER. THIS IS NOT INTENDED TO BE COMPLETE COMPOSITIONAL DISCLOSURE. REFER TO SECTION 14 FOR APPLICABLE STATES' RIGHT TO KNOW AND OTHER REGULATORY INFORMATION.

Product and/or Component(s) Carcinogenic According to:

IARC NTP OTHER NONE X OSHA

Composition:

Chemical Name

CAS Number

Exposure Limits

Range in %

>99.0

1-Propene, polymer with ethene modifiers/additives

Particulates not otherwise regulated (PNOR)

Particulates not otherwise classifed (PNOC)

9010-79-1 CBI

15 (mg/m3) TWA-OSHA

(TOTAL DUST)

(mg/m³) TWA-OSHA (RESPIRABLE FRACTION)

(mg/m³) TWA-ACGIH

(INHALABLE PARTICULATE)

3 (mg/m³) TWA-ACGIH (RESPIRABLE PARTICULATE)

THIS PRODUCT IS CONSIDERED NON-HAZARDOUS ACCORDING TO OSHA (1910.1200).

DATE ISSUED

13S10A 3/6/2001

DATE PRINTED

3/6/2001

COMPANY

HUNTSMAN

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Appearance:

Translucent pellets

Odor:

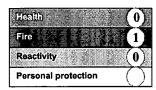
Odorless

WARNING STATEMENT

CAUTION!

MAY CAUSE EYE IRRITATION.

Hazardous Material Information System (United States)



National Fire Protection Association NFPA (United States)

Health



POTENTIAL HEALTH EFFECTS

Primary Route of Exposure

Eye X Skin X Inhalation X Ingestion

Effects of Overexposure

Acute:

Eyes:

Product may contain residual amounts of dust or small particulates which may cause eye irritation or abrasion experienced as mild discomfort and slight excess redness of the eye.

Skin:

Product may contain residual amounts of dust or small particulates that may cause skin

irritation or abrasion experienced as local redness with possible mild discomfort.

Inhalation:

Dust may cause irritation of the nose and throat. Overexposure to high concentrations of dust may cause respiratory irritation, experienced as coughing and difficulty breathing. Product not volatile at ambient temperatures. Vapors or mist in high concentrations, as generated from spraying or heating in an enclosed space, may cause minimal irritation.

Ingestion:

May cause abdominal discomfort, nausea, and diarrhea.

Sensitization Properties:

Unknown

Chronic:

Prolonged or repeated inhalation of dust or particulates may impair lung function or cause lung damage.

Medical Conditions Aggravated by Exposure:

There is no evidence that this product aggravates an existing medical condition.

Other Remarks:

None

PRODUCT CODE AND NAME : 13S10A
DATE ISSUED : 3/6/2001
DATE PRINTED : 3/6/2001
COMPANY : HUNTSMAN

4. FIRST AID MEASURES

Eyes

Flush eyes with plenty of water for several minutes. Remove larger particulates from the eye as one would any foreign object. Get medical attention if eye irritation persists or particulates are difficult to remove from the eye.

Skin:

Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists.

Ingestion:

None considered necessary.

Inhalation:

If irritation, headache, or drowsiness occurs, remove to fresh air.

Other Instructions:

None

5. FIRE-FIGHTING MEASURES

Ignition Temperature - AIT (degrees C):

570 (1058°F)

Flash Point (degrees C):

>343 (>650°F)

Flammable Limits % (Lower-Upper):

Not determined.

Recommended Fire Extinguishing Agents And Special Procedures:

Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

Unusual or Explosive Hazards:

Hazardous melting and dripping may occur at elevated temperatures. May burn at or above flash point, and airborne dust may explode if ignited. See National Fire Protection Prevention Association Bulletin 654, "Dust Explosion Prevention, Plastics Industry 1975".

Special Protective Equipment for Firefighters:

No special equipment or procedures required.

6. ACCIDENTAL RELEASE MEASURES (Transportation Spills: CHEMTREC (800)424-9300)

Procedures in Case of Accidental Release, Breakage or Leakage:

Avoid the generation of dust clouds. Place in appropriate containers for disposal or recycle. Avoid breathing dust. Pressure demand air supplied respirators should always be worn when the airborne concentration of the contaminant or oxygen is unknown. Otherwise, wear respiratory protection and other personal protective equipment as appropriate for the potential exposure hazard. Wear gloves, goggles, and protective clothing to avoid contact with eyes, skin, or clothing. Use vacuuming or sweeping compound for clean-up. Do not dry sweep or use methods which increase dusting. Prevent entry into sewers and waterways.

If spilled when molten, allow to solidify. Sweep up released material. Clean up dust or fines with a special industrial vacuum cleaner.

13S10A

DATE ISSUED
DATE PRINTED

3/6/2001 3/6/2001

COMPANY

HUNTSMAN

7. HANDLING AND STORAGE

Precautions to be Taken in

Handling:

Practice good housekeeping and clean up spills immediately, as this product can present a serious slipping hazard. The handling of this product during loading, unloading, and fabrication may generate nuisance dusts. Take necessary precautions to prevent exposure to these dusts. When unloading bulk vehicles, do not use metal sampling devices, such as a grain thief, due to the risk of static shock and potential ignition hazards. Pneumatic handling systems, augers, and other unloading devices should be free of contaminants.

Storage:

Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

8. EXPOSURE CONTROLSIPERSONAL PROTECTION

Protective Equipment (Type)

Eye/Face Protection:

Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact. Heat resistant face shield recommended when handling hot material.

Skin Protection:

Protective clothing such as coveralls or lab coats should be worn. Launder or dry-clean when soiled. Gloves and boots resistant to chemicals and petroleum distillates also recommended. Heat protective clothing should be worn when handling heated materials.

Respiratory Protection:

Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Ventilation:

Local exhaust ventilation recommended if generating vapor, dust, or mist. If exhaust ventilation is not available or inadequate, use MSHA or NIOSH approved respirator as appropriate. It is recommended that adequate ventilation be provided at external extrusion points where the product is at elevated temperatures.

Exposure Limit for the Total Product:

None established for product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Translucent pellets

Odor:

Odorless

Boiling Point (degrees C):

Not applicable.

Melting/Freezing Point (degrees C):

Softening Point: 145-164 (293-327°F)

Specific Gravity (water=1):

0.895 - 0.905

: 13S10A

DATE ISSUED

3/6/2001 3/6/2001

DATE PRINTED
COMPANY

HUNTSMAN

pH:

Not applicable.

Vapor Pressure:

Not applicable.

Viscosity:

Not applicable.

VOC Content:

Non-volatile

Vapor Density (Air=1):

Not applicable.

Solubility in Water (%):

Insoluble

Other:

None

10. STABILITY AND REACTIVITY

This Material Reacts Violently With:

Air Water Heat Strong Oxidizers Others None of these X

Comments:

This product is softened by oxidizing agents (i.e. nitric acid, free halogens), hydrocarbons (i.e. benzene, gasoline, petroleum ether), and by chlorinated hydrocarbons

Products Evolved When Subjected to Heat or Combustion:

At processing temperatures some degree of thermal degradation will occur. A variety of decomposition products may occur including, simple hydrocarbons, to toxic and irritating gases such as carbon, carbon monoxide, carbon dioxide, acids, ketones, and aldehydes. Some special film grades may also release fluorinated organic substances.

Hazardous Polymerizations:

DO NOT OCCUR

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA)

Oral:

LD50 > 5.00 g/kg (rat) practically non-toxic

Dermal:

LD50 > 2.00 g/kg (rabbit) practically non-toxic

IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES)

See "Other", below.

Other:

Product may contain dust or particulates that may cause eye irritation or abrasion.

: 13S10A

DATE ISSUED

DATE PRINTED

: 3/6/2001 : 3/6/2001

COMPANY

: HUNTSMAN

12. DISPOSAL CONSIDERATIONS:

Waste Disposal Methods:

This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Remarks:

None

13. TRANSPORT INFORMATION

Transportation

DOT:

Proper Shipping Name:

Not regulated.

Hazard Class:

Not regulated.

Identification Number:

Not regulated.

Packing Group:

Not regulated.

Label Required:

Not regulated.

IMDG

Proper Shipping Name:

Not regulated.

ICAO

Proper Shipping Name:

Not regulated.

TDG

Proper Shipping Name:

Not regulated.

Hazard Class:

Not regulated.

Identification Number:

Not regulated.

Label Required:

Not regulated.

13S10A

DATE ISSUED

3/6/2001

DATE PRINTED

3/6/2001

COMPANY

HUNTSMAN

14. REGULATORY INFORMATION

Federal Regulations:

SARA Title III:

Section 302/304 Extremely Hazardous Substances

Chemical Name

CAS Number

Range in %

TPQ

RQ

None.

Section 311 Hazardous Categorization:

Acute Chronic

Section 313 Toxic Chemical

Fire

Pressure

Reactive

N/A X

Chemical Name

CAS Number

Concentration

None.

CERCLA 102(a)/DOT Hazardous Substances:

Chemical Name

CAS Number

Range in %

RQ

None.

States Right-to-Know Regulations:

Chemical Name

State Right-to-know

None.

State list: CT (Connecticut), FL (Florida), IL (Illinois), MI (Michigan), LA (Louisiana), MA

(Massachusetts), NJ (New Jersey), PA (Pennsylvania), RI (Rhode Island)

California Prop. 65:

The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

Chemical Name

CAS Number

None.

INTERNATIONAL REGULATIONS:

TSCA Inventory Status:

This product, or its components, are listed on, or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

WHMIS Classification:

Not regulated.

Canadian Inventory Status:

This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

EINECS Inventory Status:

This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

Australian Inventory Status:

This product, or its components, are listed on or are exempt from the Australian Inventory of Chemical Substances (AICS).

Japan Inventory Status:

This product, or its components, are listed on or are exempt from the Japanese Ministry of International Trade and Industry (MITI) inventory.

: 13S10A

DATE ISSUED

3/6/2001 3/6/2001

DATE PRINTED
COMPANY

HUNTSMAN

15. ENVIRONMENTAL INFORMATION

Aquatic Toxicity:

Not determined.

Mobility:

Not determined.

Persistence and Biodegradability:

Not determined.

Potential to Bioaccumulate:

Not determined.

Remarks:

None

16. OTHER INFORMATION 3/6/2001

None

THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE. IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT FOR PURPOSE OF HAZARD COMMUNICATION AS PART OF HUNTSMAN'S PRODUCT SAFETY PROGRAM. IT IS NOT INTENDED TO CONSTITUTE PERFORMANCE INFORMATION CONCERNING THE PRODUCT. NO EXPRESS WARRANTY, OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE WITH RESPECT TO THE PRODUCT OR THE INFORMATION CONTAINED HEREIN. DATA SHEETS ARE AVAILABLE FOR ALL HUNTSMAN PRODUCTS. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL HUNTSMAN PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE AND YOU ARE ENCOURAGED AND REQUESTED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE APPLICABILITY OR EFFECTS OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, USER SHOULD CONSULT HIS LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. HUNTSMAN DOES NOT UNDERTAKE TO FURNISH ADVICE ON SUCH MATTERS.

Original Issue.

Date Issued: 3/6/2001.

Inquiries regarding MSDS should be directed to:

HUNTSMAN Coordinator, Product Safety P.O. Box 27707 Houston, TX 77227-7707

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

BLACK BORDERS

IMAGE CUT OFF AT TOP, BOTTOM OR SIDES

FADED TEXT OR DRAWING

BLURRED OR ILLEGIBLE TEXT OR DRAWING

SKEWED/SLANTED IMAGES

COLOR OR BLACK AND WHITE PHOTOGRAPHS

GRAY SCALE DOCUMENTS

LINES OR MARKS ON ORIGINAL DOCUMENT

REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY

IMAGES ARE BEST AVAILABLE COPY.

□ OTHER:

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.